



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/563,473

01/04/2006

Lewis Frier Jardine

4280-110

1358

23448

7590

08/24/2007

INTELLECTUAL PROPERTY / TECHNOLOGY LAW

PO BOX 14329

RESEARCH TRIANGLE PARK, NC 27709

EXAMINER

HOANG, SON T

ART UNIT

PAPER NUMBER

2169

MAIL DATE

DELIVERY MODE

08/24/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

80

Office Action Summary	Application No. 10/563,473	Applicant(s) JARDINE ET AL.	
	Examiner Son T. Hoang	Art Unit 2169	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-66 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 January 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The instant application having Application No. 10/563,473 has a total of 66 claims pending in the application; there are 3 independent claims and 63 dependent claims, all of which are ready for examination by the Examiner.

Oath/Declaration

1. The Applicant's oath/declaration received on February 27, 2006 is objected by the Examiner. Evidently the Applicant has inputted the wrong filing dates for United Kingdom Patent Application No. 0315636.1 and European Patent Application No. PCT/EP04/06812 with Day/Month/Year Filed format. Appropriate corrections are required.

Information Disclosure Statement

2. As required by **M.P.E.P. 609(C)**, the Applicant's submission of the Information Disclosure Statements dated January 04, 2006 and January 20, 2006 is acknowledged by the Examiner and the cited references have been considered in the examination of the claims now pending. As required by **M.P.E.P 609 C(2)**, a copy of the PTOL-1449 initialed and dated by the examiner is attached to the instant office action.

Priority

3. The Applicant's claim for foreign priority of United Kingdom Patent Application No. 0315636.1 and European Patent Application No. PCT/EP04/06812 is confirmed. The Examiner takes the foreign filing date of July 04, 2003 into consideration.

Abstract

4. The abstract of the disclosure is objected due to the use of implied language.

Note that in the abstract, the language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc... See MPEP § 608.01(b). Appropriate correction is required.

5. The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

Drawings

6. The drawings were received on January 04, 2006. These drawings are objected by the Examiner. Evidently, all the items in *Figure 1* are not labeled accordingly. Appropriate correction is required.

Claim Objections

7. **Claim 42** is objected to because of the following informalities: the obscured use of the phrase "*query representation layer to be a selected one of the dossier definitions*". Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. **Claims 6-50, 54-56, 58, 60-62, and 64-66** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention.

Regarding **claim 3**, the Applicant recites the "*the method according to claim 1 and 2*". Accordingly, this is one of the improper ways for multiple dependent claim wording. See MPEP § 608.01(n).

Regarding **claim 38**, the Applicant recites the "*the method according to claims 24-37*". Accordingly, this is one of the improper ways for multiple dependent claim wording. See MPEP § 608.01(n).

Regarding **claim 58**, the Applicant recites the "*System according to claim 49 to 55*". Accordingly, this is one of the improper ways for multiple dependent claim wording. See MPEP § 608.01(n).

Regarding **claim 61**, the Applicant recites the "*System according to claims 51 to 60*". Accordingly, this is one of the improper ways for multiple dependent claim wording. See MPEP § 608.01(n).

Regarding **claims 6-50; 54-56, 58, 60-62**; each claim has a reference back to another multi-dependent claim. Accordingly, this is one of the improper ways for multiple dependent claim wording. See MPEP § 608.01(n).

Regarding **claims 58**, it refers back to a "*System according to claim 49 to 55*". However, **claims 49-50** refer to "*Use of the method for searching*".

Regarding **claim 59**, it refers back to a "*System according to claim 1*". However, **claim 1** refers to "*Method for searching*".

Regarding **claim 60**, it refers back to a "*System according to any of the above claims*". However, **claim 1** refers to "*Method for searching*".

Regarding **claim 64**, it refers back to a "*Database structure of claim 61*". However, **claim 61** refers to "*System for searching*".

Regarding **claim 65**, it refers back to a "*Database structure of claims 61 or 62*". However, **claim 61 or 62** refers to "*System for searching*".

Regarding **claim 66**, it does not set forth to particularly point out and distinctly claim the subject matters which the Applicant regards as the invention. Evidently, the claim does not set limitations of what is/are included and what is/are not included. It is assumed that entire specification is claimed through these claims.

Claim Rejections - 35 USC § 101

10. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

11. **Claims 63-65** are rejected under 35 U.S.C. 101 as being directed to non-statutory subject matters.

Regarding **claims 63-65**, "*database structure for use in a method for searching*" is being recited. However, the Applicant does not provide any explicit definition(s) for the term "*database structure*" in the disclosure. Furthermore, "*a database structure*" can easily be interpreted by a person with ordinary skills in the art as an abstract idea which does not fall within at least one of the four

categories of patent eligible subject matter recited in 35 U.S.C. 101 (process, machine, manufacture, or composition of matter).

The claims above lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 U.S.C. 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable

as abstract ideas because “[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.”)

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate Paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this Section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. **Claims 1-7, 9, 11-23, 25-30, 32-48; 51-60; 63-66;** are rejected under 35 U.S.C. 102(b) as being anticipated by Whitley et al. (Pub. No. US 2001/0034734, published on October 25, 2001; hereinafter Whitley).

Regarding **claim 1**, Whitley clearly shows and discloses a method for searching at least one data source using a query ([0052]) and comprising the following steps:

a first step of generating a plurality of query templates, where each query template can be used to define at least a part of the query (*The user requests a player profiler by clicking a player profiler button on the search mode page. This request causes the web server to download the player profiler to the browser for user display, [0055] and Figure 10H*);

a second step of logically joining at least some of said plurality of query templates to create a query representation (*The user then selects one or more positions by clicking on a corresponding description positions.*

This request initiates the web server to download the position details page for user display to the browser, [0055] and Figure 10I);

a third step of inputting or selecting input variables into data entry fields of said query representation (The position details page provides labeled fields for the user to enter various statistical parameters appropriate to the selected sport and position such as pass completions an interceptions for a quarterback. The user inputs these parameters or edits previously entered parameters, [0055]);

a fourth step for selecting data elements that will be returned by the query (Figure 10I shows multiple templates for Quarterback position search, the search results will be based on the completion of all fields or at least a field);

a fifth step of generating the query using the query representation, input variables and the data elements to be returned (The user's entered parameters are used to form a search query. The search query is formulated to locate athletes whose statistics meet the minimum requirements of all of the entered parameters, [0055]);

a sixth step of sending said query to the at least one data source (The athlete catalog is searched based on this query and the catalog information retrieved, [0055]);

a seventh step of returning source results generated using the query from the at least one data source (The web server downloads the

search results to the browser, which displays the results to the user, [0055] and Figure 10E);

an eighth step of generating a reference to a collated data set for each of the source results (If the query related to a specific athlete who had video segments stored on the sports video database, the browser would display links to these video segments. If the subscriber selected one of these links, the browser would upload this link to the web server and invoke a multimedia player plug-in, [0048]), and

a ninth step of selecting one of source results (After a search, the user clicks on a record of interest, [0052]).

Regarding **claim 2**, Whitley further discloses a method, further comprising a prior step of defining how to generate one or more types of collated data set (dossiers) *(An athlete database having text data relating to a plurality of athletes is accessible by the server. A sports video database having multimedia clips relating to at least a portion of the athletes is also accessible by the server. The athlete database and the sports video database are linked, [0007]).*

Regarding **claim 3**, Whitley further discloses a method, wherein the query template is related to at least part of the definition for generating a dossier *(Figures 10D, 10H and 10I show multiple search templates for a query, each template corresponds to at least an attribute that constitutes the collated data set).*

Regarding **claim 4**, Whitley further discloses a method, wherein zero source results are returned in the eighth step (*Figure 10I, when a user enters a number of "Pass Completion" or "Pass attempts" that is out of range, i.e. 1,000,000; the search therefore will eventually return an error or zero search results*).

Regarding **claim 5**, Whitley further discloses a method, wherein the query representation is defined with reference to the dossiers (*Figure 10I shows a search for "Offense" position with all the search templates correspond to attributes of a "Quarterback"*).

Regarding **claim 6**, Whitley further discloses a method, further comprising a step of searching for matching dossiers by means of the query representation (*If the query related to a specific athlete who had video segments stored on the sports video database, the browser would display links to these video segments. If the subscriber selected one of these links, the browser would upload this link to the web server and invoke a multimedia player plug-in, [0048]*).

Regarding **claim 7**, Whitley further discloses a method, wherein the step of searching for matching dossiers further includes a step of directly searching the data sources from which the dossiers are derived (*The video segments are derived from the sports video database including clips of various sporting event each featuring a particular athlete listed in the athlete database, [0045]*).

Regarding **claim 9**, Whitley further discloses a method, further comprising:
a tenth step of displaying a selected one of the source results as a displayed dossier (*If the query related to a specific athlete who had video segments stored on the sports video database, the browser would display links to these video segments. If the subscriber selected one of these links, the browser would upload this link to the web server and invoke a multimedia player plug-in, [0048]).*

Regarding **claim 11**, Whitley further discloses a method, further comprising a step of defining the content of the dossiers using one or more dossier definitions (*If the query related to a specific athlete who had video segments stored on the sports video database, the browser would display links to these video segments. If the subscriber selected one of these links, the browser would upload this link to the web server and invoke a multimedia player plug-in, [0048]).*

Regarding **claim 12**, Whitley further discloses a method, wherein the dossier definition includes one or more instances of a report definitions, whereby each report definition includes a retrieval definition to define how the members may be retrieved from a data source (*Video segments of various sporting events each featuring a particular athlete listed in the athlete database can be retrieved from the multimedia database, [0045]), a display definition defining how the results may be displayed (If the query related to a specific athlete who had video segments stored on the sports video database, the browser would display links to these video segments. If the subscriber selected one of these links, the browser*

would upload this link to the web server and invoke a multimedia player plug-in, [0048]), and an access definition for defining the permitted access to an instance of the report definition (*log-in process for user's verification*, [0049] and Figure 2).

Regarding **claim 13**, Whitley further discloses a method, wherein the dossier definition further includes one or more dossier reference definitions, a dossier reference definition defining a link between at least one instance of the report definition and at least one instance of a dossier definition (*If the query related to a specific athlete who had video segments stored on the sports video database, the browser would display links to these video segments. If the subscriber selected one of these links, the browser would upload this link to the web server and invoke a multimedia player plug-in*, [0048]).

Regarding **claim 14**, Whitley further discloses a method, wherein the dossier reference definition defines how a hyperlink is created between an element of a report and a dossier (*The media index provides links between information retrieved from the athlete database to related spots clips stored in the sports video database and retrieved via the media server*, [0072] and Figure 9).

Regarding **claim 15**, Whitley further discloses a method, further including a step of the creation of one or more report template mappings using one of the report definitions (*Content for the templates is derived from catalogs, which are subject specific indexes of the athlete database, content files and the athlete database*, [0050]).

Regarding **claim 16**, Whitley further discloses a method, further comprising a step of taking the retrieval definition and inverting said retrieval definition to create a search definition, the search definition being used in the construction of a query that will retrieve source results (*Figure 10I shows the all the necessary attributes to search for an athlete in the athlete database. When a user enters at least one search attributes, the result(s) will return a list of players who satisfy the attribute(s) requirements*).

Regarding **claim 17**, Whitley further discloses a method, further comprising a step of taking the display definition and inverting said display definition to create a template form (*Figure 10E shows the display definition of search result with template in Figure 10D. It's quite inherent that the displayed attributes when inverted would yield exactly the same attributes as in the search template*).

Regarding **claim 18**, Whitley further discloses a method, wherein one or more columns in a tabular one of the report definitions are associated with one or more of the data entry fields in the associated one of the template forms (*Each of the figures 10D-10J corresponds to a specific search templates with appropriate data entry fields and template forms*).

Regarding **claim 19**, Whitley further discloses a method, further comprising a step of creating a dossier linkage relationship between an element in a template form with a corresponding one of the dossier definitions (*If the*

query related to a specific athlete who had video segments stored on the sports video database, the browser would display links to these video segments. If the subscriber selected one of these links, the browser would upload this link to the web server and invoke a multimedia player plug-in, [0048]).

Regarding **claim 20**, Whitley further discloses a method, wherein the said dossier linkage relationship is created using the dossier reference definition in a corresponding one of the report definitions (*If the query related to a specific athlete who had video segments stored on the sports video database, the browser would display links to these video segments. If the subscriber selected one of these links, the browser would upload this link to the web server and invoke a multimedia player plug-in, [0048]).*

Regarding **claim 21**, Whitley further discloses a method, wherein the step of collating the selected source result further includes a step of selecting one of the one or more dossier definition for use in collating the source data (*The media index provides links between information retrieved from the athlete database to related spots clips stored in the sports video database and retrieved via the media server, [0072] and Figure 9).*

Regarding **claim 22**, Whitley further discloses a method, wherein the step of creating a query representation comprises a step of assembling a query structure in which said plurality of query templates are joined using nesting and/or Boolean logic (*Figures 10D, 10H, 10I show the AND of Boolean logic).*

Regarding **claim 23**, Whitley further discloses a method, further including a step of constructing a query representation layer using a plurality of query templates logically joined together using Boolean logic (*Figures 10D, 10H, 10I show the AND of Boolean logic*).

Regarding **claim 25**, Whitley further discloses a method, further comprising a step of creating a plurality of query context subsets of the plurality of query templates wherein each query context subset contains query templates that are associated with a single one of the one or more dossier definition through report template mapping (*Content for the templates is derived from catalogs, which are subject specific indexes of the athlete database, content files and the athlete database, [0050]*).

Regarding **claim 26**, Whitley further discloses a method, further comprising a step of creating a plurality of access control subsets of the plurality of query templates, wherein each access control subset contains only those query templates that may be accessed by a particular user of the system (*Each of the login pages are related to a specific sport of interest, such as football, baseball, basketball or hockey, [0049]*).

Regarding **claim 27**, Whitley further discloses a method, wherein the plurality of query templates belong to a selected one of the plurality of query context subsets and also belong to the access control subset (*Each of the login pages are related to a specific sport of interest, such as football, baseball,*

basketball or hockey. If the login information is verified, that is, the user is registered with the portal and has the appropriate access privileges, the web server constructs personalized pages at the subscriber's request. The personalized pages are constructed from sport-specific templates, [0049]-[0050]).

Regarding **claim 28**, Whitley further discloses a method, further comprising a step of defining an initial query context of the query by selecting an initial one of the plurality of dossier definitions (*The sport-specific template are based upon subscriber information and preferences derived from the membership directory and programmed business rules. Content for the templates is derived from catalogs, which are subject specific indexed of the athlete database, content files and the athlete database, [0050]).*

Regarding **claim 29**, Whitley further discloses a method of creating an initial query representation layer (*The sport-specific template are based upon subscriber information and preferences derived from the membership directory and programmed business rules. Content for the templates is derived from catalogs, which are subject specific indexed of the athlete database, content files and the athlete database, [0050]).*

Regarding **claim 30**, Whitley further discloses a method, further comprising a step for setting the query context of the initial query representation layer according to the initial query context (*The sport-specific template are based upon subscriber information and preferences derived from the membership*

directory and programmed business rules. Content for the templates is derived from catalogs, which are subject specific indexed of the athlete database, content files and the athlete database. The web server formats and downloads the personalized pages to the browser providing the subscriber with requested sport recruiting information, [0050]).

Regarding **claim 31**, Whitley further discloses a method, further comprising a step of nesting one or more empty query representation layers below a selected one of a plurality of query templates in the query representation layer and of setting a query context of said empty query representation layers (*Figures 10D-10I shows the context of the template as searching for athlete(s) who satisfy one or more search attributes. Figure 10D is an example that shows AND Boolean of searching attributes. When one attribute field is left empty, the search will still be conducted for other entered attributes).*

Regarding **claim 32**, Whitley further discloses a method, further comprising a step of creating a dossier linkage subset having one or more dossier definitions, wherein each member of the dossier linkage subset has a dossier linkage relationship with the said selected one of the plurality of query templates (*Each of the login pages are related to a specific sport of interest, such as football, baseball, basketball or hockey, [0049]. It's inherent that each one of these templates corresponds to the linkage between athlete database and video database for video segments of a particular athlete who satisfies the search attributes of each template).*

Regarding **claim 33**, Whitley further discloses a method, further comprising a step of setting a context of the query representation layer by selecting a member of said dossier linkage subset (*Each of the login pages are related to a specific sport of interest, such as football, baseball, basketball or hockey, [0049]. It's inherent that each one of these templates corresponds to the linkage between athlete database and video database for video segments of a particular athlete who satisfies the search attributes of each template*).

Regarding **claim 34**, Whitley further discloses a method, further comprising a step of storing and retrieving sets of query representations (*The web server formats and downloads the personalized pages to the browser providing the subscriber with requested sport recruiting information, [0050]*).

Regarding **claim 35**, Whitley further discloses a method, further comprising a step of blocking retrieval of query representations which contain query templates not belonging to the access control subset for a user (*The browser uploads the login information to the web server, which passes it to site security. Site security accesses a membership directory to verify the subscriber information. If the information cannot be verified, the web server downloads an access denied page to the browser, [0049]*).

Regarding **claim 36**, Whitley further discloses a method, further comprising a step of nesting a retrieved query representation below a selected one of the plurality of query templates in the current query representation

(Figures 10C-10J show the tabular format of multiple templates, each template representation corresponds to a set of searching attributes).

Regarding **claim 37**, Whitley further discloses a method, further comprising a step of ensuring that an initial context of the said retrieved query representation has a dossier linkage relationship with the said selected one of the plurality of query templates under which it will be nested *(Each of the login pages are related to a specific sport of interest, such as football, baseball, basketball or hockey, [0049]. It's inherent that each one of these templates corresponds to the linkage between athlete database and video database for video segments of a particular athlete who satisfies the search attributes of each template).*

Regarding **claim 38**, Whitley further discloses a method, further comprising a step of adding a query template with a nested empty query representation layer to the existing query representation *(Figure 10D is an example that shows AND Boolean of searching attributes. When one attribute field is left empty, the search will still be conducted for other entered attributes).*

Regarding **claim 39**, Whitley further discloses a method, further comprising a step of selecting one of the query representations into which the said query template and nested query representation layer will be added *(Figure 10D is an example that shows AND Boolean of searching attributes. When one*

attribute field is left empty, the search will still be conducted for other entered attributes).

Regarding **claim 40**, Whitley further discloses a method, further comprising a step of creating a template linkage subset of a plurality of linked query templates that have a linkage relationship to the query context of the query representation layer (*Each of the login pages are related to a specific sport of interest, such as football, baseball, basketball or hockey, [0049]. It's inherent that each one of these templates corresponds to the linkage between athlete database and video database for video segments of a particular athlete who satisfies the search attributes of each template).*

Regarding **claim 41**, Whitley further discloses a method, further comprising a step of selecting one of the plurality of query templates within the template linkage subset (*Figures 10C-10I show that the user has selected football template).*

Regarding **claim 42**, Whitley further discloses a method, further comprising a step of setting the query context of the said added nested empty query representation layer to be a selected one of the dossier definitions (*Figure 10D is an example that shows AND Boolean of searching attributes. When one attribute field is left empty, the search will still be conducted for other entered attributes).*

Regarding **claim 43**, Whitley further discloses a method, further comprising a step of creating a dossier definition subset of the dossier definitions wherein the dossier definitions contain report definitions which have a report template mapping to the linked query templates (*Content for the templates is derived from catalogs, which are subject specific indexes of the athlete database, content files and the athlete database, [0050]*).

Regarding **claim 44**, Whitley further discloses a method wherein two or more of the at least one data sources have a different structure (*An athlete database having text data relating to a plurality of athletes and a sports video database having multimedia clips relating to at least a portion of the athletes, [0007]*).

Regarding **claim 45**, Whitley further discloses a method, further comprising a step of exporting said results to an application program (*A graphical user interface (GUI) means organized and displays selected portions of the records and the video clips at the client, [0008]*).

Regarding **claim 46**, Whitley further discloses a method, further comprising a step of assembling one or more compound query templates from the plurality of query templates and using the compound query templates to create a compound query representation (*Figure 10D is an example that shows when a user enters the search parameters, which the web server forms into a*

query. The athlete catalog is searched based on this query and the corresponding catalog information is retrieved, [0052]).

Regarding **claim 47**, Whitley further discloses a method, further comprising a step of presetting and or hiding the contents of data entry fields in a query template (Figures 10D- 10I).

Regarding **claim 48**, Whitley further discloses a method, further comprising a step of storing and retrieving compound templates (*The athlete catalog is searched based on this query and the corresponding catalog information is retrieved. The web server downloads these search results to the browser, which displays the results to the user, [0052]).*

Regarding **claim 51**, Whitley clearly shows and discloses a system for searching data (Figures 1-3E), comprising:

a display device for displaying and editing a set of query templates with data entry fields (*The GUI prompts the connected subscriber for inputs that form a search query relating to one or more athletes, see Figures 10A-10R);*

an input device for inputting at least one variable into at least one of the set of query templates (*Figure 10F shows position search. The user can select a particular position by clicking on the graphic associated with that position, [0053]. It's inherent that the "clicking" action is done by a mouse);*

a query generation device to generate a query using the method of one of claims 1 to 50 (*The user enters the search parameters, e.g., name, region and school, which the web server forms into a query, [0052]*); and

a display device for viewing the query that will be sent to at least one or more databases source (*The GUI prompts the connected subscriber for inputs that form a search query relating to one or more athletes. It's inherent that the user can review their choice of attributes before clicking the "Search" button, see Figures 10A-10R*).

Regarding **claim 52**, Whitley further discloses a system further comprising a selection device to select at least one element in the set of query templates to display at least one query template with data entry fields (*The user requests a player search by clicking a player search button on the search mode page. This request causes the web server to download the player search page to the browser for user display. It's inherent that the "clicking" action is done by a mouse, [0052]*).

Regarding **claim 53**, Whitley further discloses a system, further comprising a query database having a plurality of reports for display on the display device and a plurality of query templates, wherein each one of the plurality of query templates is linked to one of the plurality of reports (*Figure 10E is the report being displayed after the search done by query template in Figure 10D*).

Regarding **claim 54**, Whitley further discloses a system, further comprising a template generator for generating the query template from a report definition (*The personalized pages are constructed from sport-specific templates. These templates, in turn, are based upon subscriber information and preferences derived from the membership directory and programmed business rules. Content of the template is derived from catalogs, which are subject specific indexed of the athlete database, content files and the athlete database, [0050]*).

Regarding **claim 55**, Whitley further discloses a system, further comprising a display generator for taking the display description and creating a template display description for the corresponding template, whereby entries in the report definition become data entry fields in the query template (*The personalized pages are constructed from sport-specific templates. These templates, in turn, are based upon subscriber information and preferences derived from the membership directory and programmed business rules. Content of the template is derived from catalogs, which are subject specific indexed of the athlete database, content files and the athlete database, [0050]*).

Regarding **claim 56**, Whitley further discloses a system, further comprising a search definition engine for taking the retrieval definition and generating a search definition describing how a subset of the dossiers may be created where the corresponding report for each said particular dossier matches a definition created by the input variables in the query template (*The catalog build server is used to "crawl" the athlete database on database server to build*

search catalogs. Specifically, the catalog build server creates HTML pages from queries to the database server and crawls the resulting pages to create an index of the database. The search server uses the catalogs created by the build server to satisfy user search requests. Specifically, the search server obtains a query from the user, looks up the query in the catalog and returns the results to the user, such as described above with respect to portions of Figures 3A-3E, [0071]).

Regarding **claim 57**, Whitley further discloses a system, wherein the search generator engine uses the retrieval definition to automatically generate an SQL search definition (*The membership directory is stored in a database server database, but LDAP is used to translate all requests into SQL queries, [0070]).*

Regarding **claim 58**, Whitley further discloses a system, wherein the search definition engine generator combines multiple search definitions according to the query representation to construct a single SQL statement that queries at least one of the data sources (*Figure 10D is an example that shows AND Boolean of searching attributes. When one attribute field is left empty, the search will still be conducted for other entered attributes. It's inherent that all the search attributes will be combined into one single SQL statement using the AND Boolean logic).*

Regarding **claim 59**, Whitley further discloses a system, wherein the query generation device converts a query representation into a multiple stage query and wherein results returned from early stages are incorporated into the

generation of later stage queries (*The player bookmark page is a GUI that presents the user with records identifying all previously bookmarked players that have not been deleted from the bookmark page. The identifying information displayed is an athlete's name, position, institution name, city and state. The user clicks on a record of interest. The corresponding athlete ID is used to request athlete information from the athlete database. The athlete page is generated using a template and the retrieved athlete information, [0056]*).

Regarding **claim 63**, Whitley clearly shows and discloses a database structure for use in a method for searching data sources (Figures 1-3E) having a plurality of dossier definitions, report definitions (*The database server interprets the query and retrieves corresponding athlete information from the athlete database. The athlete information is passed to the web server. The web server constructs a corresponding web page that is downloaded via the Internet to the browser to be displayed to the subscriber with proper access privileges, [0048]*) and a plurality of query templates having a plurality of input fields (*Figures 10D-10I are examples that show the "Football" template as a specific sport of interest with plurality of input fields*), wherein one of the plurality of report definitions is associated with one of the plurality of query templates (*The personalized pages are constructed from sport-specific templates. These templates, in turn, are based upon subscriber information and preferences derived from the membership directory and programmed business rules, [0050], see also Figures 10A-10B*).

Regarding **claim 64**, Whitley further discloses a database structure, further comprising a set of access controls on each dossier definition and report definition (*Each of the login pages are related to a specific sport of interest, such as football, baseball, basketball or hockey. If the login information is verified, that is, the user is registered with the portal and has the appropriate access privileges, the web server constructs personalized pages at the subscriber's request. The personalized pages are constructed from sport-specific templates,* [0049]-[0050]).

Regarding **claim 65**, Whitley further discloses a database structure, further comprising a display definition defining how to display results returned from the method for searching databases (*The athlete catalog is searched based on this query and the corresponding catalog information is retrieved. The web server downloads these search results to the browser, which display the results to the user,* [0052]).

Regarding **claim 66**, Whitley clearly shows and discloses the system and method for searching at least one data source as set forth in the description with reference to the drawings (Figures 1-3E).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

16. **Claims 8, 10, and 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Whitney et al. (Pub. No. US 2001/0034734, published on October 25, 2001; hereinafter Whitley) in view of Anthony (Pat. No. US 5,815,830, filed on September 29, 1998).

Regarding **claims 8**, Whitley does not explicitly disclose the step of searching for matching dossiers includes a step of logically comparing other ones of the dossiers that are indirectly or directly referenced by the dossier being matched.

Anthony discloses the process of concatenating the text of the topic into 3-word groups. Each time the match is found, e.g., Jupiter, Satellites of Jupiter, Io, Rings of Saturn, The Red Spot; the process will create a hyperlink that links each match found with the corresponding text of the hyperlinked topic ([Column 6, Line 40 → Column 7, Line 13]).

It would have been obvious to a person with ordinary skills in the art at the time of the invention to incorporate the teachings of Anthony with the teachings of Whitley for the purpose of cross-referencing data in a computer which does not require an author to manually identify and code links within the data ([Column 2, Lines 34-43] of Anthony).

Regarding **claim 10**, Anthony further discloses a step of hyperlinking from an element of the displayed dossier to another dossier (*When a user selects the portion "planet" of "planets of our solar system" topic, the sub-portion text of "planet" is shown and contains the text description for portion "planet". This text description sub-portion of "planet" contains hyperlinks to "Jupiter", "Satellites of Jupiter", "Io" and "Rings of Saturn" as shown in [Column 6, Line 40 – Column 7, Line 13]. If the user clicks the mouse on any of the hyperlinked words which refer to any of text / picture portions in [Column 6, Lines 1-10], they would automatically be taken to that portion and its associated sub-portion text would be displayed with again any hyperlinks automatically found and highlighted, [Column 6, Line 1 → Column 7, Line 13]).*

Regarding **claims 24**, Anthony further discloses the step of using nested query representation layers to check the contents of dossiers indirectly or directly referenced by the matching dossier (*The process of concatenating the text of the topic into 3-word groups. Each time the match is found, e.g., Jupiter, Satellites of Jupiter, Io, Rings of Saturn, The Red Spot; the process will create a hyperlink that links each match found with the corresponding text of the hyperlinked topic, ([Column 6, Line 40 → Column 7, Line 13]). Note that the process includes the step of querying the database to find words or phrases that have been found to exist as topics in their own right and logical deduction, ([Column 6, Lines 21-36]).*

17. **Claims 49-50**, and **61-62** are rejected under 35 U.S.C. 103(a) as being unpatentable over Whitney et al. (Pub. No. US 2001/0034734, published on October 25, 2001; hereinafter Whitley) in view of Stanley et al. (Pub. No. US 2004/0003132, filed on December 6, 2001; hereinafter Stanley).

Regarding **claims 49-50**, and **61-62**, Whitley does not disclose searching data in life science industries particularly those regarding biological, genetic, chemical or pharmacological data.

Stanley discloses an architecture, business model and method of doing business related to searching for and analyzing data generally and in particular relative to biological, chemical and life sciences type information ([0156]).

It would have been obvious to a person with ordinary skills in the art at the time of the invention to incorporate the teachings of Stanley with the teachings of

Whitley for the purpose of integrating of multiple data types and data dimensions for efficient and accurate multidimensional, parallel queries and analyses for diversified data content and dynamic applications needs in heterogeneous local and/or networked computing and applications environments with particular benefits and applicability to life sciences computing and applications environments ([0046] of Stanley).

18. **Claim 60** is rejected under 35 U.S.C. 103(a) as being unpatentable over Whitney et al. (Pub. No. US 2001/0034734, published on October 25, 2001; hereinafter Whitley) in view of Linthicum et al. (Pub. No. US 2003/0004908, filed on June 29, 2001; hereinafter Linthicum).

Regarding **claim 60**, Whitley does not disclose automatic conversion of a query representation into natural language.

Linthicum discloses natural language generation technology is the study of how computer programs can be made to produce high-quality natural language text from computer's internal representation of information ([0051]).

It would have been obvious to a person with ordinary skills in the art at the time of the invention to incorporate the teachings of Linthicum with the teachings of Whitley for the purpose of delivering the natural language instructions to the field service personnel ([0010] of Linthicum).

Conclusion

19. These following prior arts made of record and not relied upon are considered pertinent to Applicant's disclosure:

Li et al. (Pat. No. US 7,120,626) teaches content retrieval based on semantic association.

Denesuk et al. (Pat. No. US 6,993,534) teaches data store for knowledge-based data mining system.

The Examiner requests, in response to this Office action, support(s) must be shown for language added to any original claims on amendment and any new claims. That is, indicate support for newly added claim language by specifically pointing to page(s) and line no(s) in the specification and/or drawing figure(s). This will assist the examiner in prosecuting the application.

When responding to this office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present, in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections See 37 CFR 1.111(c).

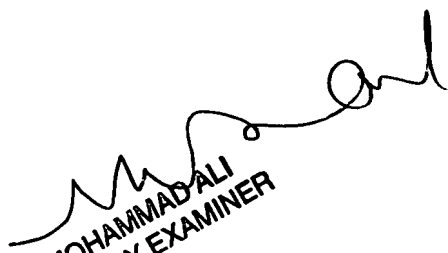
Art Unit: 2169

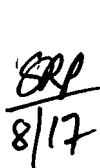
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son T. Hoang whose telephone number is (571) 270-1752. The Examiner can normally be reached on Monday - Friday (7:30 AM – 4:00 PM).

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Mohammad Ali can be reached on (571) 272-4105. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


MOHAMMAD ALI
PRIMARY EXAMINER


/S.H./
Son T. Hoang
Patent Examiner
August 14, 2007

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :04 January 2006 and 20 January 2006.